Systematic Exceptions to West Germanic Gemination: A New Account*

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1. Introdcution

The primary concern of this paper is, on the basis of Murray and Vennemann (forthcoming) (henceforth M-V), to provide a more elaborated account of West Germanic Gemination (hereafter WGG) than M-V originally proposed. Specifically, we shall concentrate on the apparent failure of WGG after *VVC and *VCC with particular reference to OE, and attempt at a principled explanation for their aberrant behavior. In the course of discussion, greater precision will be given to M-V's Syllable Contact Law by building into it the Relativized Consonant Strength Value.

2. Competing Explanations

Following M-V, I take WGG to be a manifestation of Syllable Contact Law. Under this view, *VC$\underset{\frown}{i}$V[1], which receives syllabification as VC\$$\underset{\frown}{i}$V, constituttes a less preferred structure in that the strength value of C-$\underset{\frown}{i}$ is extremely high.

As it turns out, however, in West Germanic langauges other than OHG, WGG took place only after a short vowel[2], i.e. V—$\underset{\frown}{i}$. Thus, we are confronted with the following question: why were VVC$\underset{\frown}{i}$ and VCC$\underset{\frown}{i}$ exempt from WGG in spite of the unfavarable status with respect to syllable contact? Apparently, what is at stake here is something that has to do with syllable internal

structure.

A couple of possible solutions along this line present themselves. The first one is an appeal to canonical surface consonantal clusters. Lass and Anderson (1975) among others come closest to this view. In this analysis, the consideration of canonical concatenations overrides that of SCL. In concrete terms, the outputs which would have come out had WGG applied to the strings in question are unacceptably overlong:*VVCC$i̯ and *VCCC$i̯. This interpretation, however, receives falsificaiton in the face of **baidi̯an* 'compel', **bōsmi̯an* 'bend', etc., which are incompatible with the constraint. Moreover, a possible elaboration, whereby CC is restricted to C_iC_i, is also untenable: *nǣddre* 'snake', which is a result of a gemination (not WGG, though) in pre-OE (cf. Go. *nadrs*, OS *nādra*, OHG *nātra*), is an indication that VVC_iC_i was not of a disfavorable status. Other forms of this category are *āttrest* 'poison', *ǣddran* 'kidneys', etc.

The second possibility is to posit a different syllabification for *VVCi̯ and *VCCi̯, i.e. *VV$Vi̯ and *VC$Ci̯. This manner of syllabification is unwarranted, however, despite M-V's argument to the contrary (M-V:517ff.). Three sources of evidence can be brought to bear on the issue. The first is the Go. writing convention. The second consists of later phonological developments in daughter langauges. And the third is permissible word initial clusters.

The writing convention definitely contradicts the syllabification at issue: (cf. Hechtenberg Collitz 1906).

(1) *idd|jedun* 'went'
band|jan 'prisner'
þrafs|tei 'confort'
faurh|tei 'fear'
sok|jandans 'seek'
wop|jandam 'weep'

As for the second category of evidence, in M-V's view, Go.

suffixal alternation supports *VVC\underset{\sim}{i}$ and *VCC\underset{\sim}{i}$. They hold the difference in syllabification (cf. VC$$\underset{\sim}{i}$) to be responsible for the divergent behaviors of *VVC$\underset{\sim}{i}$ and *VCC$\underset{\sim}{i}$ on the one hand, and *VC$\underset{\sim}{i}$ on the other. As will be shown in 4, this process can be given a straightforward charaterization under the assumption of the identical syllabification, i.e. *VVC$$\underset{\sim}{i}$, *VCC$$\underset{\sim}{i}$ and *VC$$\underset{\sim}{i}$.

Another piece of evidence coming from this source is the strengthening process, whereby syllable initial glides became strengthened:

(2) *$bid\underset{\sim}{i}an$>$bidjan$ 'bid'
*$s\bar{o}k\underset{\sim}{i}an$>$s\bar{o}kjan$ 'seek'

Under M-V's interpretation, however, *$s\bar{o}k\underset{\sim}{i}an$ could not have undergone the process, which is clearly not the case. Thus, M-V are forced to assume that the strengthened $\underset{\sim}{i}$ was generalized to those otherwise in purely phonological terms ineligiable cases. It should be noted, however, that their hypothesis, backed by no firm empirical evidence, commands little explanatory power. The postulaiton of this ad hoc process obvioulsy originates from the problematical syllabification in question.

Lastly, the fact that C$\underset{\sim}{i}$ is not a permissible consonant cluster in PGmc (cf. Moulton 1972) is a strong testimony that the proposed syllabificaiotn is unviable.

From the above argument it can be fairly concluded that an appeal to the different syllabification is less than successful in explaining the failure of WGG in *VVC$\underset{\sim}{i}$ and *VCC$\underset{\sim}{i}$.

3. A Proposed Solution

The foregoing argument has made it clear that V$\left\{\begin{matrix}V\\C\end{matrix}\right\}$$C$$\underset{\sim}{i}$ is an unwarranted syllabification. Accordingly, the correct syllabification should be V$\left\{\begin{matrix}V\\C\end{matrix}\right\}$C$$\underset{\sim}{i}$. It bears repetition to note here that this analysis is supported by the Go. scribal practice, and is compat-

ible with later developments and permissible consonant clusters. This is to say that our question raised earlier, i.e. why *VVC$\underset{\sim}{i}$ and *VCC$\underset{\sim}{i}$ were exempt from WGG, remains still unanswered: within M-V's framework they would likewise have undergone the process by virtue of the undesirable syllable contact, in which the offset of the preceding syllable ranks much higher in consonant strength hierarchy than the onset of the following counterpart. Thus, it should be clear by now that M-V's account is ill-articulated, though they are on the right track.

My claim is that by making crucial reference to the strength value of the segment (or complex of segments) to which the (last) offset stands in a binary (metrical) opposition, the strength value of the latter should be relativized to that of the former. This is tantamount to allowing for a finer distinciton than M-V propsoed in calculating a strength value difference. Specifically, I propose the following algorithm for determining the Relativized Consonant Strength Value (RCSV) of A, given A'A$B, where A and B stand for an offset- and onset- segment, respectively, and A' is whatever stands in a binary opposition to A:

(3) RCS(A) = CS(a) -- CS(A')
Key:RCS = Relativized Consonant Strength
CS = Consonant Strength

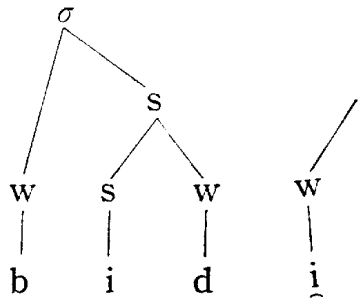
Correspondingly, M-V's SCL should be given refinement by incorporating into it RCSV as above defined:

(4) The Syllable Contact Law (SCL) (Revised):
The preference for a syllabic structure A$B, where A and B are marginal segments and *a* is the RCSV and *b* is the CSV, increases with the value of *a* minus *b*.

To see how the propsoed apparatus works out, let us consider the following examples:

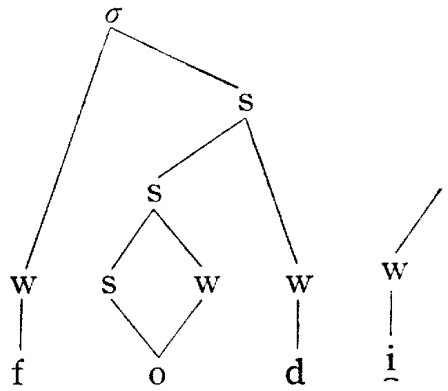
(5) a. VC$\underset{\sim}{i}$

bid$\underset{\sim}{i}$an



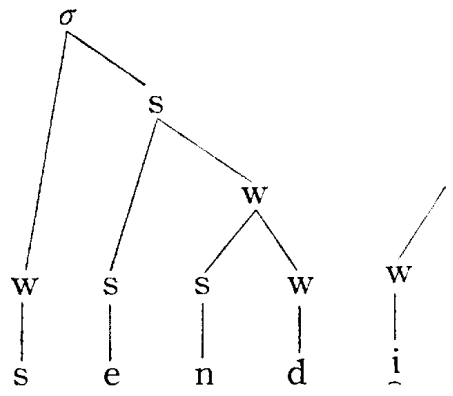
b. VVC$\underset{\sim}{i}$

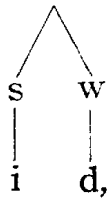
fōd$\underset{\sim}{i}$an



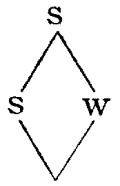
c. VCC$\underset{\sim}{i}$

send$\underset{\sim}{i}$an





In (5a), which involves a metrical opposition, RCS(d) is 6-1=5.[4] In contrast, in (5b) and (5c), where the offsets are



opposed to and , respectively, RCS(d) is $6-(1+1)=4$ for the former, and $6-4=2$ for the latter. Accordingly, the values of SC are 3, 2, 0, respectively. Thus, to our advantage, distinct values are obtainable, thereby enabling us to make a necessary differentiation among otherwise indistinguishable structures. In this way, by giving more precision to M-V's original insight into the issue the polar reactions to WGG are made subject to a unitary explanation.

4. Some Consequence

This section is designed to show that the elaboration of SCL along the proposed line provides us with an interesting account of a different phenomenon, namely the Go. suffixal alternation involving *ei/ji*. Consider the following, to begin with:

(6) *haírdeis* 'shepherd'/ *harjis* 'army'
sōkeis 'thou seekst'/*nasjis* 'thou savest'

What is of particular importance here is that the process at issue can be explained without subscribing to the porblematic syllabification M-V are led to assume (cf. M-V:518): **sō$kiis* vs. **nas$iis*. With the now available device, we can account for the divergent behaviors of long vs. short syllables under the assumption of the same syllabification, i.e. **sōk$iis* and **nas$iis*. Essentially, *i*, when preceded by VC$, receives strengthening by virtue of a greater violation of SCL, whereas the situation after $V\begin{Bmatrix}V\\C\end{Bmatrix}C\$$ remains within the limits of tolerance, resulting ultimately in the contraction to the following *i*. In an analogous fashion to WGG, these different behaviors are now reducible to the different values of *a* - *b*.

Notes

* Thanks must go to Prof. Theo Vennemann (Universität München), who encouraged me to tackle the issue treated in this paper.

1 For expository purposes, we will focus on *i* as a representative of WGG triggering segments.

2 Admittedly, this statement is somewhat oversimplified, though nothing crucial hinges on it. For details, see Simmler (1974:375ff.).

3 Cf. Campbell (1959: § 453).

4 For purposes of calculation, I extend M-V's Consonant Strength Hierarchy to include vowels as the lowest entity (value 1). This amounts to adding 1 to each of the original values M-V assume (cf. M-V:519).

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